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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 12 OCT 2005
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Applicant's or agent's file reference AP102015	FOR FURTHER ACTION See Form PCT/IPRA/416	
International application No. PCT/FI2004/000638	International filing date (day/month/year) 29.10.2004	Priority date (day/month/year) 31.10.2003
International Patent Classification (IPC) or national classification and IPC F26B 17/02, F26B 3/06		
Applicant RÄUMASTER OY et al.		

- This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 4 sheets, including this cover sheet.
- This report is also accompanied by ANNEXES, comprising:
 - ☐ (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:
 - ☐ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
 - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
 - ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

- This report contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the report |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

Date of submission of the demand 23.05.2005	Date of completion of this report 29.09.2005
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Form PCT/IPRA/409 (cover sheet) (April 2005)

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/FI2004/000638

Box No. I Basis of the report

1. With regard to the language, this report is based on:

- ☒ the international application in the language in which it was filed
- ☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rules 12.3(a) and 23.1(b))
- ☐ publication of the international application (Rule 12.4(a))
- ☐ international preliminary examination (Rules 55.2(a) and/or 55.3(a))

2. With regard to the elements of the international application, this report is based on
- (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*
- :

- ☒ the international application as originally filed/furnished
- ☐ the description:
- pages _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ the claims:
- pages _____ as originally filed/furnished
- pages* _____ as amended (together with any statement) under Article 19
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ the drawings:
- pages _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

- 3.
- ☐
- The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to the sequence listing (*specify*): _____

- 4.
- ☐
- This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to the sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/FI2004/000638

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>1-18</u>	YES
	Claims		NO
Inventive step (IS)	Claims	<u>1-18</u>	YES
	Claims		NO
Industrial applicability (IA)	Claims	<u>1-18</u>	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

The object of the invention concerns a method and an apparatus for drying bulk material on one or several drying conveyors.

The following documents are cited in the International Search Report:

D1: GB 191510670 A

D2: GB 832175 A

D1 reveals a process and an apparatus for the treatment of sewage sludge. The material is passed through a heated drying chamber, which is heated by internal flame burners, on an endless belt conveyor. (See page 1, lines 4-32; fig. 1-2 and claims 1-4.)

D2 shows a method for the manufacture of fibrous webs, for example paper webs, wherein heat for drying a web and electric energy are derived from a diesel engine plant. The air required for drying the web is first passed through a heat exchanger for extracting heat from the cooling water of the diesel engine plant. (See claim 1-2.)

D1 represents the most relevant prior art.

The invention according to claims 1, 7 and 14-18 differs from D1 by the fact that the gas/air in the drying chamber is heated, using a heat exchanger, with the energy from waste water.

.../...

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of: V

It is not considered obvious to a person skilled in the art to use the heating energy derived via heat exchangers from waste water as the source of energy for drying the material on the conveyor instead of flame burners according to D1.

The documents cited in the International Search Report represent the prior art. The claimed invention stated in claims 1-18 is not considered to be anticipated by these documents. None of the documents, or any relevant combination of them reveals a method and an apparatus for drying bulk material on one or several drying conveyors as described by these claims.

According to the arguments stated above, the invention claimed in claims 1-18 is novel, considered to involve an inventive step and to have industrial applicability.